NMC
Committed to Nuclear Excellence

DAEC EMERGENCY PLANNING DEPARTMENT PROCEDURE TRANSMITTAL ACKNOWLEDGEMENT MEMO (TAM-59)

To: NRC-NRR Document Control Desk
US NRC
Washington DC 20555

Re: Entire EPIP Document (Copy 28)

PSM Title: n/a

Distribution Date: 10 / 17 / 2002
Effective Date of Change: 10 / 23 / 2002
Return by: 11 / 06 / 2002

Please perform the following to your assigned manual. If you have any questions regarding this TAM please contact Don A. Johnson at 319-851-7872.

	REMOVE	INSERT
EPIP Table of Contents Revision	Rev. 130	Rev. 131
EPIP 2.2 (PWR: 19492)	Rev. 22	Rev. 23
EPIP TSC-04 (PWR: 19280)	Rev. 2	Rev. 3
EPIP TSC-34 (PWR: 19491)	Rev. 2	Rev. 3
EPIP TSC-43 (PWR: 19431)	Rev. 0	Rev. 0

PERFORMED BY:

Print Name _____ Sign Name _____ Date _____

Please return to: K. Dunlap
PSC/Emergency Planning
3313 DAEC Rd.
Palo, IA 52324

To be completed by DAEC EP personnel only:
Date TAM returned: _____
EPTools updated: _____

A045

Procedure	Title	Revision Number	Date
1.1	Determination of Emergency Action Levels	19	09/12/01
1.2	Notification	27	9/2/02
1.3	Plant Assembly and Site Evacuation	9	09/12/01
1.4	Release of Emergency-Related Information	4	09/04/02
1.5	Activation and Operation of the EOF	3	10/16/00
2.1	Activation and Operation of the OSC	13	09/12/01
2.2	Activation and Operation of the TSC	23	10/23/02
2.3	Operation of the FTS-2001 Phone Network	6	09/04/02
2.4	Activation and Operation of the ORAA	8	09/12/01
2.5	Control Room Emergency Response Operation	14	10/15/01
2.6	Activation and Operation of the ORAL	8	10/15/01
2.7	Activation and Operation of the ODEF	6	10/15/01
2.8	Security Threat	1	11/16/01
3.1	In-Plant Radiological Monitoring	12	9/2/02
3.2	Field Radiological Monitoring	13	9/2/02
3.3	Dose Assessment and Protective Action	18	9/2/02
4.2	First Aid, Decontamination and Medical Support	7	8/23/02
4.3	Rescue and Emergency Repair Work	11	8/23/02
4.5	Administration of Potassium Iodide (KI)	6	10/15/01
5.2	Recovery and Re-entry	9	10/15/01

Form Number	Title	Revision Number	Referencing Procedure
CR-01	OSM/OSS Checklist	Rev. 2	EPIP 2.5
CR-02	Back Panel Communicator Checklist	Rev. 1	EPIP 2.5
CR-03	Dose Projection & ARM Data Sheet	Rev. 0	EPIP 2.5
CR-04	Control Room to TSC Command and Control Transfer Checklist	Rev. 1	EPIP 2.5
EAL-01	Abnormal Rad Levels/Radioactive Effluent Table	Rev. 2	EPIP 1.1
EAL-02	Fission Barrier Table	Rev. 2	EPIP 1.1
EAL-03	Hazards & Other Conditions Affecting Plant Safety	Rev. 2	EPIP 1.1
EAL-04	System Malfunction Table	Rev. 2	EPIP 1.1
EOF - 02	NRC - HPN Communicator Checklist	Rev. 3	EPIP 1.5
EOF - 03	Technical Recorder Checklist	Rev. 2	EPIP 1.5
EOF - 04	Summary of Computer Data Backup Collection Activities	Rev. 1	EPIP 1.5
EOF - 05	EOF Information Services Representative Checklist	Rev. 3	EPIP 1.5
EOF - 06	DAEC Key Parameter Log	Rev. 0	EPIP 1.5
EOF - 07	Emergency Response and Recovery Director Checklist	Rev. 3	EPIP 1.5
EOF - 08	Rad & EOF Manager Checklist	Rev. 6	EPIP 1.5, 3.3
EOF – 09	EOF STA/OPS Liaison Checklist	Rev. 0	EPIP 1.5
EOF – 10	EOF-TSC Communicator Checklist	Rev. 3	EPIP 1.5
EOF – 11	Support Services Coordinator Checklist	Rev. 2	EPIP 1.5
EOF – 12	Field Team Director Checklist	Rev. 0	EPIP 1.5, 3.3
EOF – 13	Radiological Data Communicator Checklist	Rev. 0	EPIP 1.5, 3.3

EOF – 14	EOF MIDAS Operator Checklist	Rev. 1	EPIP 1.5, 3.3
EOF – 15	Radiological Data Plotter Checklist	Rev. 0	EPIP 1.5, 3.3
EOF – 16	Radiological Assessment Coordinator Checklist	Rev. 1	EPIP 1.5, 3.3
EOF – 17	EOF Security Access Clerk Checklist	Rev. 2	EPIP 1.5
EOF – 18	EOF Staffing Accountability Roster	Rev. 2	EPIP 1.5
EOF – 19	Drill Announcement Message	Rev. 0	EPIP 1.4, 1.5
EOF – 20	Emergency Announcement Message	Rev. 1	EPIP 1.4, 1.5
EOF – 21	Personnel Access Log	Rev. 1	EPIP 1.4, 1.5
EOF – 22	Registration Form	Rev. 0	EPIP 14, 1.5
EOF – 23	Security Post Log	Rev. 2	EPIP 1.4, 1.5
EOF – 24	First Floor Security Post Description	Rev. 2	EPIP 1.4, 1.5
EOF – 25	Fourteenth Floor Security Post Description	Rev. 11	EPIP 1.5
EOF – 27	Status Update Message – EOF Communicator	Rev. 0	EPIP 1.5
EOF – 28	Verbal Closeout Summary	Rev. 0	EPIP 1.5
EOP – 29	Written Closeout Summary	Rev. 0	EPIP 1.5
EOF – 30	Status Board	Rev. 0	EPIP 1.5
EOF – 31	Access B adge Example	Rev. 0	EPIP 1.5
EOF – 32	EOF Staff Response	Rev. 2	EPIP .15
EOF – 33	Recovery Issues	Rev. 0	EPIP 5.2
EOF – 34	EOF Activities	Rev. 0	EPIP 5.2
EOF – 35	Recovery Phase Plan Outline Guidance	Rev. 0	EPIP .52
EOF – 36	RE-Entry Briefing Guide	Rev. 0	EPIP 5.2
EOF – 37	RE-Entry Debriefing Guide	Rev. 0	EPIP 5.2
EOF – 38	EOF Messenger Checklist	Rev. 0	EPIP 1.5
EOF – 39	Plant Status Recorder Checklist	Rev. 0	EPIP 1.5
JPIC – 01	JPIC Manager Checklist	Rev. 4	EPIP 1.4
JPIC – 03	Alliant Spokesperson Checklist	Rev. 3	EPIP 1.4

JPIC – 04	Technical Liaison Checklist	Rev. 4	EPIP 1.4
JPIC – 05	Sequence of Events	Rev. 0	EPIP 1.4
JPIC – 06	Public Information Officer Support Checklist	Rev. 5	EPIP 1.4
JPIC – 07	Logistics Coordinator Checklist	Rev. 4	EPIP 1.4
JPIC – 08	Logistics Support Checklist	Rev. 4	EPIP 1.4
JPIC – 09	Audiovisual Support Checklist	Rev. 4	EPIP 1.4
JPIC – 11	Rumor Control Coordinator I Checklist	Rev. 3	EPIP 1.4
JPIC – 12	Rumor Control Event Summary Log	Rev. 1	EPIP 1.4
JPIC – 13	Rumor Control Coordinator II Checklist	Rev. 2	EPIP 1.4
JPIC – 14	Public Rumor Control Checklist	Rev. 2	EPIP 1.4
JPIC – 15	News Media Rumor Control Checklist	Rev. 4	EPIP 1.4
JPIC – 16	Assistant JPIC Manager Checklist	Rev. 3	EPIP 1.4
JPIC – 17	JPIC Security Access Control Checklist	Rev. 3	EPIP 1.4
JPIC – 18	Sixth Floor Security Post Description	Rev. 2	EPIP 1.4
JPIC – 19	JPIC Distribution List	Rev. 2	EPIP 1.4
NOTE-01	ERO Notification – Off-hours Phone System Callout	Rev. 3	EPIP 1.2
NOTE-02	ERO Notification – Alphanumeric Paging System Callout	Rev. 3	EPIP 1.2
NOTE-03	Event Notification Worksheet	Rev. 1	EPIP 1.2
NOTE-04	Plant Assembly Notification	Rev. 2	EPIP 1.2
NOTE-05	Emergency Action Level Notification	Rev. 4	EPIP 1.2
NOTE-06	Plant Page for Emergency Classification Changes	Rev. 1	EPIP 1.2
NOTE-07	Basic Notification Flowpath	Rev. 0	EPIP 1.2
ODEF-01	ODEF Decontamination Waiting Area	Rev. 0	EPIP 2.7
ODEF-02	Floor Plan for ORAL/ODEF	Rev. 0	EPIP 2.7
ODEF-03	Travel Route to ORAL/ODEF	Rev. 0	EPIP 2.7
ODEF-04	12th Avenue Entrance to ORAL/ODEF	Rev. 0	EPIP 2.7

OSC-11	Emergency Assignment Staffing Board Duties	Rev. 0	EPIP 2.1
OSC-12	External Exposure Limits	Rev. 0	EPIP 4.3
OSC-13	Guidance on Dose Limits for Workers Performing Emergency Services	Rev. 0	EPIP 4.3
OSC-14	Guidelines Regarding Selection of Volunteers	Rev. 0	EPIP 4.3
OSC-15	OSC Repair Team Work Order	Rev. 0	EPIP 4.3
OSC-16	Repair Team Datasheet Flowpath	Rev. 0	EPIP 4.3
PAR – 01	PAR Decision Making – Recommendations	Rev. 0	EPIP 3.3
PAR – 02	PAR Decision Making – Flowchart	Rev. 0	EPIP 3.3
PASE-02	Onsite Assembly Locations	Rev. 2	EPIP 1.3
PASE-05	Site Evacuation Routes	Rev. 1	EPIP 1.3
SAM-01	EOP-SAG Transition Checklist	Rev. 0	EPIP 2.2
TSC-01	Emergency Coordinator Checklist	Rev. 3	EPIP 2.2
TSC-02	TSC Supervisor Checklist	Rev. 2	EPIP 2.2
TSC-03	Site Radiation Protection Coordinator Checklist	Rev. 1	EPIP 2.2
TSC-04	Technical & Engineering Supervisor Checklist	Rev. 3	EPIP 2.2
TSC-05	Quality Assurance Checklist	Rev. 1	EPIP 2.2
TSC-06	Security & Support Supervisor Checklist	Rev. 1	EPIP 2.2
TSC-07	Administrative Supervisor Checklist	Rev. 1	EPIP 2.2
TSC-08	Material Management Supervisor Checklist	Rev. 1	EPIP 2.2
TSC-09	TSC-CR-OSC Communicator Checklist	Rev. 2	EPIP 2.2
TSC-10	CR-TSC-OSC Communicator Checklist	Rev. 2	EPIP 2.2
TSC-11	TSC-EOF-JPIC Communicator Checklist	Rev. 1	EPIP 2.2
TSC-12	ENS Communicator Checklist	Rev. 2	EPIP 2.2
TSC-13	HPN Communicator Checklist	Rev. 1	EPIP 2.2
TSC-14	TSC/OSC Operations Liaison Checklist	Rev. 2	EPIP 2.2
TSC-15	Radiological Support Staff Checklist	Rev. 1	EPIP 2.2
TSC-16	Radio Operator – Offsite Checklist	Rev. 0	EPIP 2.2

TSC-17	Radio Operator – Onsite Checklist	Rev. 0	EPIP 2.2
TSC-18	TSC MIDAS Operator Checklist	Rev. 0	EPIP 2.2
TSC-19	Technical & Analysis Engineer Checklist	Rev. 1	EPIP 2.2
TSC-20	TSC Operations Supervisor	Rev. 2	EPIP 2.2
TSC-21	Electrical Engineer Checklist	Rev. 0	EPIP 2.2
TSC-22	I & C Engineer Checklist	Rev. 0	EPIP 2.2
TSC-23	Mechanical Engineer Checklist	Rev. 0	EPIP 2.2
TSC-24	Reactor Engineer Checklist	Rev. 2	EPIP 2.2
TSC-25	SPDS Operator Checklist	Rev. 1	EPIP 2.2
TSC-26	Information Services Representative Checklist	Rev. 2	EPIP 2.2
TSC-27	Fire Marshall Checklist	Rev. 1	EPIP 2.2
TSC-28	NRC Roles During A Nuclear Power Plant Emergency Checklist	Rev. 0	EPIP 2.2
TSC-29	TSC Minimum Staffing Level	Rev. 2	EPIP 2.2
TSC-30	Emergency Action Request Log	Rev. 0	EPIP 2.2
TSC-31	Radio Operator Log	Rev. 0	EPIP 2.2
TSC-32	Status Board Recorder	Rev. 1	EPIP 2.2
TSC-33	Typical Organization of the NRC Site Team	Rev. 0	EPIP 2.2
TSC-34	TSC Organization Chart	Rev. 3	EPIP 2.2
TSC-35	Assignment Form	Rev. 0	EPIP 5.2
TSC-36	Deactivation Report	Rev. 0	EPIP 5.2
TSC-37	Plant Operations Status	Rev. 0	EPIP 5.2
TSC-38	TSC/Control Room/OSC Activities	Rev. 0	EPIP 5.2
TSC-39	TSC Clerical Checklist	Rev. 0	EPIP 2.2
TSC-40	ARM Locations	Rev. 0	EPIP 3.1/4.3
TSC-41	PASS Capabilities	Rev. 0	EPIP 3.1
TSC-42	On-Site Map	Rev. 0	EPIP 3.2
TSC-43	ESB Logon Instructions (TSC/CR/EOF)	Rev. 0	EPIP 2.2

EMERGENCY PLAN IMPLEMENTING PROCEDURES	EPIP 2.2
ACTIVATION AND OPERATION OF THE TSC	Rev. 23 Page 1 of 16

Effective Date: 10/23/02

TECHNICAL REVIEW

Prepared by: Don A. Johnson Date: 10/12/02

Reviewed by: Russell L. Titus Date: 10/14/02
Independent Reviewer

PROCEDURE APPROVAL

I am responsible for the technical content of this procedure.

Approved by: Paul D. Sullivan Date: 10/14/2
Manager, Emergency Planning

Table of Contents

1.0 PURPOSE

(1) This procedure provides instructions for activation and operation of the Technical Support Center (TSC). The basis for this procedure is documented in NUREG-0654, Planning Standard H and the DAEC Emergency Plan, Section B.

2.0 DEFINITIONS

The following definitions supplement those contained in the Quality Assurance Manual, Appendix B, "Glossary of Terms".

(1) **Activation** – Facility is staffed, (i.e., all 30-minute TSC responders signed onto the TSC Staffing Board). The TSC is required to be activated within 30-minutes of event declaration.

(2) **Accident Management Team (AMT)** – Personnel trained in accident mitigation strategies and response during Severe Accident Management events.

(3) **Emergency Action Level (EAL)** – Four classifications for determining appropriate emergency actions: Notice of Unusual Event (UE), Alert, Site Area Emergency (SAE), and General Emergency (GE).

(4) **Emergency Coordinator (EC)** – Plant Manager, or designee, assigned command and control of the ERO until relieved by the ER&RD.

(5) **Emergency Operating Procedures (EOPs)** – Symptom based procedures which are entered when key plant parameters are threatened and provides accident mitigation strategies to be taken by the plant up to the point that Primary Containment Flooding is required.

(6) **Emergency Response & Recovery Director (ER&RD)** – Site Vice President, or designee, assigned overall command and control of the ERO.

(7) **Emergency Response Organization (ERO)** – The team of trained personnel who respond to emergency declarations in support of the Plant.

(8) **Emergency Telephone Book (ETB)** – A listing of all positions identified and personnel assigned to those ERO positions.

(9) **Operational** – Facility assumes responsibility for EAL declarations, State & County notifications, Protective Action Recommendations (PARs), etc., from the Control Room.

(10) **Severe Accident Guidelines (SAGs)** – Symptom based procedures which provide accident mitigation strategies to be taken by the plant following the point when it is determined that Primary Containment Flooding is required.

(11) **Technical Support Guidelines (TSGs)** – Tools to provide a method for the development and optimization of the accident mitigation strategies. The TSGs are intended to enhance the ability of the ERO to assess control parameters, plant status, system status and EOP/SAG actions.

3.0 INSTRUCTIONS

3.1 TSC ACTIVATION

(1) The TSC may be activated at a NOTIFICATION OF UNUSUAL EVENT at the discretion of the Emergency Coordinator (EC), however, the TSC shall be activated for any event classified as an ALERT or greater. At an ALERT classification and subsequent sounding of the Evacuation alarm and Plant Page announcement, the TSC must be activated within 30 minutes.

(2) All personnel assigned to the TSC shall report to the TSC. Personnel must first swipe at any identified emergency accountability swipe card reader. The emergency accountability card readers are located at the TSC entrance, the Admin. Building hallway (OSC), and the Warehouse. Personnel then proceed to sign in on the TSC Emergency Assignment Staffing Board, acquire a position badge, position handbook and follow all instructions in the applicable position checklists. Position checklists are referenced in Appendix 1.

(a) After signing the TSC Staffing Board and obtaining the EC Position Handbook, the EC reports to the Control Room to obtain a detailed turnover from the Operations Shift Manager/Supervisor (OSM/OSS). He/she then relieves the OSM/OSS of ERO responsibilities and proceeds to the TSC to assume overall command and control of the ERO. The EC should comply with the items identified in their position checklist.

1. Only the first EC to sign onto the TSC Staffing Board should go to the Control Room. All subsequent EC's who report should remain in the TSC to assist until dismissed. This is to minimize congestion in the Control Room.

(b) The following positions may report to the Control Room after signing onto the TSC Staffing Board and obtaining their applicable Position Handbook:

1. TSC Ops Supervisor

   a. The first TSC Ops Supervisor to sign onto the TSC Staffing Board may wish to receive a briefing from the OSM/OSS on the operational status of the plant. All subsequent responders shall remain in the TSC until dismissed.

   b. The TSC Ops Supervisor shall relocate to the TSC after receiving the briefing.

2. TSC ENS Communicator

   a. The first TSC ENS Communicator should proceed to the Control Room after signing onto the TSC Staffing Board and obtaining their Position Handbook to assist with communicating with the NRC Operations Center. All subsequent responders shall remain in the TSC until dismissed.

   b. The TSC ENS Communicator shall relocate to the TSC with the Emergency Coordinator after the NRC Operations Center has been notified of the event.

3. CR-TSC Communicator

   a. The first CR-TSC Communicator shall proceed to the Control Room after signing onto the TSC Staffing Board and obtaining their Position Handbook. All subsequent responders shall remain in the TSC until dismissed.

   b. The CR-TSC Communicator shall remain in the Control Room.

(3) In the absence of the EC, the Technical and Engineering Supervisor assumes the command and control function of the TSC.

(4) The Technical and Engineering Supervisor is responsible for ensuring all minimum staffing requirements for the TSC are met. If necessary, the Technical and Engineering Supervisor may appoint qualified personnel to fill all vacant positions. Minimum staffing requirements are identified in TSC-29. The Technical and Engineering Supervisor should comply with the items identified in their position checklist.

(5) During activation of the TSC, computer links should be established. These include startup and transmission of:

(a) ERDS to the NRC Operations Center (within 1-hour of event declaration).

(b) SPDS to various displays in the facility.

(c) The Electronic Status Board.

(6) Establish telephone communications between the:

(a) TSC, Control Room and OSC.

(b) TSC, EOF and JPIC.

(c) ENS circuit to the NRC Operations Center.

(d) HPN circuit to the NRC Operations Center.

3.2 STAFFING

(1) The minimum staffing level is reflected in EPIP Form No. TSC-29 in accordance with Reference 1 and Reference 3.

(a) Upon staffing the minimum 30-minute positions the TSC is considered activated.

(2) The Technical and Engineering Supervisor is responsible for the activation of the TSC. Upon all minimum staffing requirements being satisfied, the Technical and Engineering Supervisor shall inform the EC, and initiate a PA announcement to ERO personnel. The announcement should state that all staffing requirements have been met and that the TSC has been declared activated.

(3) Upon initiation of the Evacuation Alarm (at an ALERT or greater), the following action should be taken to activate the TSC:

(a) All onsite ERO personnel, other than those designated to report to the Control Room, OSC, JPIC and EOF, shall report to the TSC.

(b) Upon arrival in the TSC, personnel shall proceed to the TSC Emergency Assignment Staffing Board, sign in, locate the applicable position badge and then acquire their associated position handbook. Utilize the position specific checklist to ensure that the minimum requirements for that position are accomplished.

(4) ERO position checklists are as listed below:

(a) Emergency Coordinator: EPIP Form TSC-01.

(b) Site Radiation Protection Coordinator: EPIP Form TSC-03.

(c) Technical & Engineering Supervisor: EPIP Form TSC-04.

(d) Quality Assurance: EPIP Form TSC-05.

(e) Security & Support Supervisor: EPIP Form TSC-06.

(f) Administrative Supervisor: EPIP Form TSC-07.

(g) Material Management Supervisor: EPIP Form TSC-08.

(h) TSC-CR-OSC Communicator: EPIP Form TSC-09.

(i) CR-TSC-OSC Communicator: EPIP Form TSC-10.

(j) TSC-EOF-JPIC Communicator: EPIP Form TSC-11.

(k) ENS Communicator: EPIP Form TSC-12.

(l) HPN Communicator: EPIP Form TSC-13.

(m) TSC/OSC Operations Liaison: EPIP Form TSC-14.

(n) Radiological Support Staff: EPIP Form TSC-15.

(o) Radio Operator-Offsite: EPIP Form TSC-16.

(p) Radio Operator-Onsite: EPIP Form TSC-17.

(q) TSC MIDAS Operator: EPIP Form TSC-18.

(r) Technical & Analysis Engineer: EPIP Form TSC-19.

(s) TSC Operations Supervisor: EPIP Form TSC-20

(t) Electrical Engineer: EPIP Form TSC-21.

(u) I & C Engineer: EPIP Form TSC-22.

(v) Mechanical Engineer: EPIP Form TSC-23.

(w) Reactor Engineer: EPIP Form TSC-24.

(x) SPDS Operator: EPIP Form TSC-25.

(y) Information Services Representative: EPIP Form TSC-26.

(z) Fire Marshall: EPIP Form TSC-27.

(aa) NRC Roles During A Nuclear Power Plant Emergency: EPIP Form TSC-28.

(bb) TSC Minimum Staffing Level: EPIP Form TSC-29.

(cc) Emergency Action Request Log: EPIP Form TSC-30.

(dd) Radio Operator Log: EPIP Form TSC-31.

(ee) TSC Organization (typical): EPIP Form TSC-34

(ff) TSC Clerical: EPIP Form TSC-39

(5) If positions remain unstaffed, the Technical and Engineering Supervisor and/or Emergency Coordinator may assign qualified individuals to the unstaffed positions and supplement the assembled staff by further call-out. Further call-out should be coordinated between the Security and Support Supervisor and the Administrative Supervisor.

(6) Upon being advised by the Technical and Engineering Supervisor that the TSC is staffed and has been declared activated, the EC shall transit from the Control Room to the TSC. The EC should brief the TSC staff regarding current plant status and provide direction as to the response actions and tasks to be pursued.

3.3 OPERATION OF THE TSC

(1) The EC assumes the overall command and control function of the ERO. In the absence of the EC, the Technical and Engineering Supervisor will assume the responsibilities of the EC.

(2) The TSC, under the supervision of the EC, shall perform the following key functions:

(a) Provide assistance to the on-shift operating personnel.

(b) Complete vital area accountability.

(c) Establish/verify TSC/OSC habitability.

(d) Coordinate engineering, emergency repair work, and temporary modifications.

(e) Communicate with local, State, Federal and corporate organizations.

(f) Initiate all EAL notifications, until relieved of this function by the EOF.

(g) Trend all vital plant parameters.

(h) Evaluate plant conditions and effluent monitoring systems to determine if a significant release has occurred, is in progress, or may potentially occur.

(i) Evaluate dose projections and develop protective action recommendations, as prescribed in reference 2.

(j) Communicate any protective action recommendations to the local and State emergency operations centers.

(3) The OSM/OSS should advise the OSC Supervisor and the TSC Operations Supervisor as to the need to dispatch operators to local plant areas.

(4) All operational activities should be conducted in accordance with approved procedures. Where procedural requirements cannot be complied with, TSC staff personnel should be assigned to assist the Control Room in preparing temporary changes or developing temporary procedures.

(5) Adherence to Technical Specification requirements shall be maintained. In the event that deviation from Technical Specification requirements is immediately

needed to protect the health and safety of the public, reasonable action that departs from a license condition or Technical Specification is permissible, as specified in 10 CFR 50.54(x).

(a) Prior to taking such actions, approval shall be granted, at a minimum, by a licensed Senior Reactor Operator, as specified in 10 CFR 50.54(y).

(b) The NRC shall be notified in accordance with 10 CFR 50.72.

(6) When significant changes in plant status occur, or when new information relevant to onsite or offsite response actions become known, the EC should ensure that such information is disseminated to all TSC staff. This information should be disseminated via a PA announcement and placed onto the Electronic Status Board.

(7) Plant status briefings should be conducted approximately every 30 minutes or sooner. The announcements should be preceded with, "Attention staff personnel, a status briefing will occur in 1 minute". While briefings are being conducted all communications should be halted, if possible, and personnel attention should be focused on the briefing.

(8) Logistics and administrative support needs shall be provided under the supervision of the Security and Support Supervisor and shall include the following:

(a) Procurement expediting and warehouse support.

(b) Food, clothing, and transportation needs.

(c) Temporary office facilities and communications, typing/word processing and reproduction equipment.

(9) Where response actions will be required over a protracted period of time, the EC shall take action to ensure that personnel staffing and shift assignments are made so that continuous coverage is available for all required functions.

3.4 TECHNICAL EVALUATION AND CORRECTIVE ACTION ACTIVITIES

(1) Based upon the initiating event(s) and current plant status information, the Engineering Staff, under the direction of the Technical & Engineering Supervisor shall perform the following functions:

(a) Evaluate available options which will aid in terminating the transient and enable the plant to be returned to a safe and stable condition.

(b) Review drawings, specifications and other engineering data to ensure that technical evaluations are conducted with the latest information and that operational evolutions are properly planned.

(c) Recommend prioritization of response options which, if implemented, would assist in mitigating the event, restore the plant to a safe condition, minimize or stop any radiological release in progress.

(d) Soliciting recommendations and guidance regarding the event and plant conditions from appropriate vendor and contract engineering firms.

(e) Contact applicable vendors and industry organizations, (with expertise in specialized areas) who may be able to contribute to analyzing the cause of the event and proposing solutions and response actions.

(2) In developing response options, the Technical & Engineering Supervisor should coordinate with the Site Radiation Protection Coordinator (SRPC) for those options where access to existing or potentially radiologically hazardous areas may be required.

(3) When corrective actions taken involve placing systems in abnormal configurations, the effects that such off-normal modes might have on future operational evolutions shall be evaluated.

(4) In restoring the plant to a safe, stable condition, consideration should be given to minimizing the spread of radioactive contamination to other areas of the plant. Contain the radiological hazard to as few systems and as small an area as possible.

3.5 EMERGENCY RADIOLOGICAL ACTIVITIES

(1) The SRPC shall ensure that necessary protective measures are instituted for the radiological safety of all personnel on-site.

(a) Events which result in significant on-site radiological hazards should be given priority to determine assembly area habitability and assuring continued acceptability of those habitability areas.

(b) If habitability of the assembly areas is unsatisfactory or potentially unsatisfactory, the SRPC should recommend to the EC evacuation of those assembly areas.

1. For all non-essential personnel, the Offsite Relocation and Assembly Area (ORAA) should be activated in accordance with reference 5.

2. If the habitability of the ORAA is suspect (based on wind conditions), it is recommended that the alternate assembly area be the Offsite Decontamination Facility (ORAL/ODEF).

(c) Essential personnel shall relocate to alternate locations onsite in accordance with reference 6.

(2) The SRPC should ensure that the TSC/OSC staff personnel are apprised of significant radiological hazard areas within the plant and should provide recommendations to the EC regarding:

(a) Radiological concerns associated with planned response options, repair activities, etc.

(b) Personnel exposure limit increase authorization.

(c) Levels of radioiodines and the advisability of administering Potassium Iodide (KI).

(d) Reclassification of the event due to on-site radiological problems and effluent release rates.

(e) Evacuation of the site.

(3) Onsite and offsite radiological monitoring shall be conducted in the event of imminent release from the plant.

(a) Advise the EC, OSC Supervisor and HP Supervisor of the need to conduct onsite and/or offsite monitoring.

(b) Provide information regarding the projected or ongoing release to the EC, OSC Supervisor, and HP Supervisor.

3.6 NRC SITE TEAM

(1) NRC Site Team members initially dispatched to the TSC, and their TSC counterparts, are as follows:

(a) Radiation Safety Coordinator - SRPC

(b) Reactor Safety Operations Coordinator - Technical & Engineering Supervisor

(c) Security/Safeguards Coordinator - Security & Support Supervisor

(2) Upon arrival of NRC Site Team personnel, a briefing shall be conducted by, or under the direction of, the EC. Topics discussed should be:

(a) Response actions in progress at the TSC to mitigate/terminate the event.

(b) Prognosis of the event.

(c) Offsite radiological monitoring activities and results.

(d) Dose projection results and protective action recommendations that have been issued.

(e) Protective actions that have been implemented by offsite authorities in the EPZ.

(f) Any additional information requested by the NRC.

(3) Additionally, the NRC Incident Response Plan defines the NRC's responsibilities during an emergency. A description of these roles is listed in TSC-28, "NRC Roles During a Nuclear Power Plant Emergency." Refer to Reference 7 for additional organization charts for performing essential functions during a federal response to a severe reactor accident with an emphasis on state and federal coordination.

(4) The Federal Radiological Emergency Response Plan (FRERP) also establishes the NRC as Lead Federal Agency (LFA) for response to nuclear power plant accidents. As LFA, the roles assigned to the NRC include:

(a) Coordinate federal technical evaluations and assessments.

(b) Act as Lead Technical Spokesperson for the Federal Government.

(c) Assist the state in interpretation and analysis of technical information.

(d) Keep the White House informed of technical assessments.

3.7 TRANSFER OF CONTROL

(1) Upon activation of the EOF, the TSC shall relinquish the following functions, but the TSC must remain available to resume these functions in the event the EOF becomes incapable of performing them:

(a) Offsite communications, including follow-up notifications with local, State and Federal agencies.

(b) Dose projection and dose assessment activities.

(c) Offsite radiological monitoring and assessment activities, including coordination and interface with local, State and Federal organization.

(d) Development and transmittal of protective action recommendations for the public within the Emergency Planning Zone (EPZ).

3.8 UTILIZING ADDITIONAL OR ALTERNATIVE RESOURCES FOR THE ERO

(1) Emergency conditions may necessitate utilizing personnel previously qualified in certain key areas to assist, or augment, the ERO. The ERO individual for Command and Control (ER&RD, EC, or OSM depending which facility is operable) has the ability to authorize the use of such resources at their discretion.

(2) The ETB has a section dedicated to providing a list of personnel that can be called upon to assist or augment ERO functions in the following areas:

(a) Operations

1. SRO
2. RO
3. NSPEO

(b) Severe Accident Management (SAM)

(c) Fire Brigade

(d) First Aid

(e) SCBA

4.0 RECORDS

(1) Records generated by this procedure shall be retained as needed to support documentation for drills and exercises. If an emergency is declared and the TSC is activated, these records shall be retained in order to reconstruct the emergency event.

5.0 REFERENCES

(1) NUREG-0654, Rev. 1

(2) EPA 400-R-92-001, May 1992

(3) DAEC Plan

(4) Emergency Telephone Book (ETB)

(5) EPIP 2.4

(6) EPIP 1.3

(7) NUREG 1471

(8) EPIP 3.3

(9) EPIP 1.1

6.0 ATTACHMENTS

(1) TSC Forms (Position Checklists)

ATTACHMENT 1
TSC FORMS (Position Checklists)

TSC Forms	Form No.
Emergency Coordinator	TSC-01
Site Radiation Protection Coordinator	TSC-03
Technical & Engineering Supervisor	TSC-04
Quality Assurance	TSC-05
Security & Support Supervisor	TSC-06
Administrative Supervisor	TSC-07
Material Management Supervisor	TSC-08
TSC-CR-OSC Communicator	TSC-09
CR-TSC-OSC Communicator	TSC-10
TSC-EOF-JPIC Communicator	TSC-11
ENS Communicator	TSC-12
HPN Communicator	TSC-13
TSC/OSC Operations Liaison	TSC-14
Radiological Support Staff	TSC-15
Radio Operator - Offsite	TSC-16
Radio Operator - Onsite	TSC-17
TSC MIDAS Operator	TSC-18
Technical & Analysis Engineer	TSC-19
TSC Operations Supervisor	TSC-20
Electrical Engineer	TSC-21
I & C Engineer	TSC-22
Mechanical Engineer	TSC-23
Reactor Engineer	TSC-24
SPDS Operator	TSC-25
Info Services Rep.	TSC-26
Fire Marshall	TSC-27
TSC Clerical Support	TSC-39

DAEC EMERGENCY RESPONSE ORGANIZATION
POSITION SPECIFIC CHECKLIST

FACILITY: TSC **ERO POSITION:** TECH & ENG SUPERVISOR

EPIP FORM TSC-04 **REVISION #:** 3

NAME:_____ **DATE:**_____

NOTE
This checklist is intended to be an aid in your response to the ERO. Reference the applicable Emergency Procedures often, as time permits, to ensure compliance.

REFERENCES

DAEC EMERGENCY PLAN	DAEC EPIP's
Section B, 'Emergency Response Organization'	1.3, 'Plant Assembly and Accountability'
Section H, 'Emergency Facilities Staffing, Activation and Equipment'	2.1, 'Activation & Operation of the OSC'
Section J, 'Protective Response'	2.2, 'Activation & Operation of the TSC'
Section M, 'Recovery and Reentry Planning and Post-Accident Operation'	4.3, 'Rescue and Emergency Repair Work'
	5.2, 'Recovery & Reentry'

BASIC PURPOSE OF THIS ERO POSITION:

This position is responsible for staffing the TSC. Once the TSC has become operational, then the Tech & Eng Supv becomes responsible for the Engineering Staff assembled in the ERO

Time constraints to keep in mind during the event:

Facility Activation within 30 minutes (30-minute positions filled or assigned)
Accountability – Completed within 30 minutes of event declaration
ERDS activated – Within 60 minutes of initial event declaration

ACTIVATION

_____ Activate the TSC (Within 30 minutes of ALERT Declaration)

- Alert _____ declared @ _____
- Verify all 30 minute responders are filled using form TSC-29.
- TSC Declared Activated @ _____

_____ Assist EC in making the TSC Operational

- Inform the EC that 30-minute responders are staffed and the TSC is Activated. (The TSC is operational when the EC arrives and assumes control of the facility.)
- Verify Accountability is complete. Completed @ _____
- Brief the TSC/OSC via the PA system.
  - *Status of the Plant*
  - *Accountability*
  - *Status of TSC and OSC*
  - *Habitability of TSC and OSC*
  - *Immediate Response Actions In Progress*
  - *Reminder to periodically check SRD's.*
- Verify ERDS is activated within 60 minutes of ALERT declaration. Normally performed by Information Services, the Rx Engineer is the backup for this function. Activated @ _____
- Verify Information Services synchronizes clocks in the TSC and the Electronic Status Board with PPC time.
- Verify the 60-minute response TSC positions are staffed within 60 minutes of ALERT Declaration.
- Verify the other TSC positions are staffed. The expectation is for them to be staffed within 60-minutes of ALERT Declaration.
- Verify communications are established with the CR, the OSC, the ENS and the HPN. (NOTE: Allow an appropriate time to allow for the CR to setup their communications, i.e., let the CR initiate the communication link to the TSC. The TSC may initiate the communication link with the CR if the CR has not initiated the communication link within ~20-minutes of facility activation.)

- Ensure all of the TSC Supervisors are setting up their area(s) and will inform you of any problems.
- Inform the CR-TSC Communicator of the TSC/OSC activation time, and accountability completion time for entry onto the ESB
- Verify staffing for ERO Engineering Positions

  _____ Electrical Engineer

  _____ I&C Engineer

  _____ Mechanical Engineer

- Turnover operation of the TSC to the EC (@_____).

OPERATION

_____ Coordinate with the OSC Supv and TSC Ops Supv in establishing priorities and Repair Teams as necessary.

_____ Assign a staff Engineer to maintain the priority list current on the priority board and to maintain the signs relating to EAL severity levels (i.e., Alert, General Emergency, etc.).

_____ Assign a staff Engineer to maintain a running list of degraded equipment on the 'printing' dry-erase board for use when in the recovery/reentry phase.

_____ Obtain feedback from the OSC Supervisor on the completion of priority task items.

_____ Verify Emergency Team Data Sheets are filled out for each priority task item.

_____ Ensure that the engineering staff work as a team with the OSC Supervision to resolve/complete the priority task items.

_____ Assign specific engineers to resolve/complete priority task items.

_____ Verify all completed Emergency Team Data Sheets are returned to the TSC and collected.

_____ Generate an AR as necessary to document situations such as:

- QL1 equipment repaired with non-QL1 parts,
- Plant equipment in an unforeseen condition,

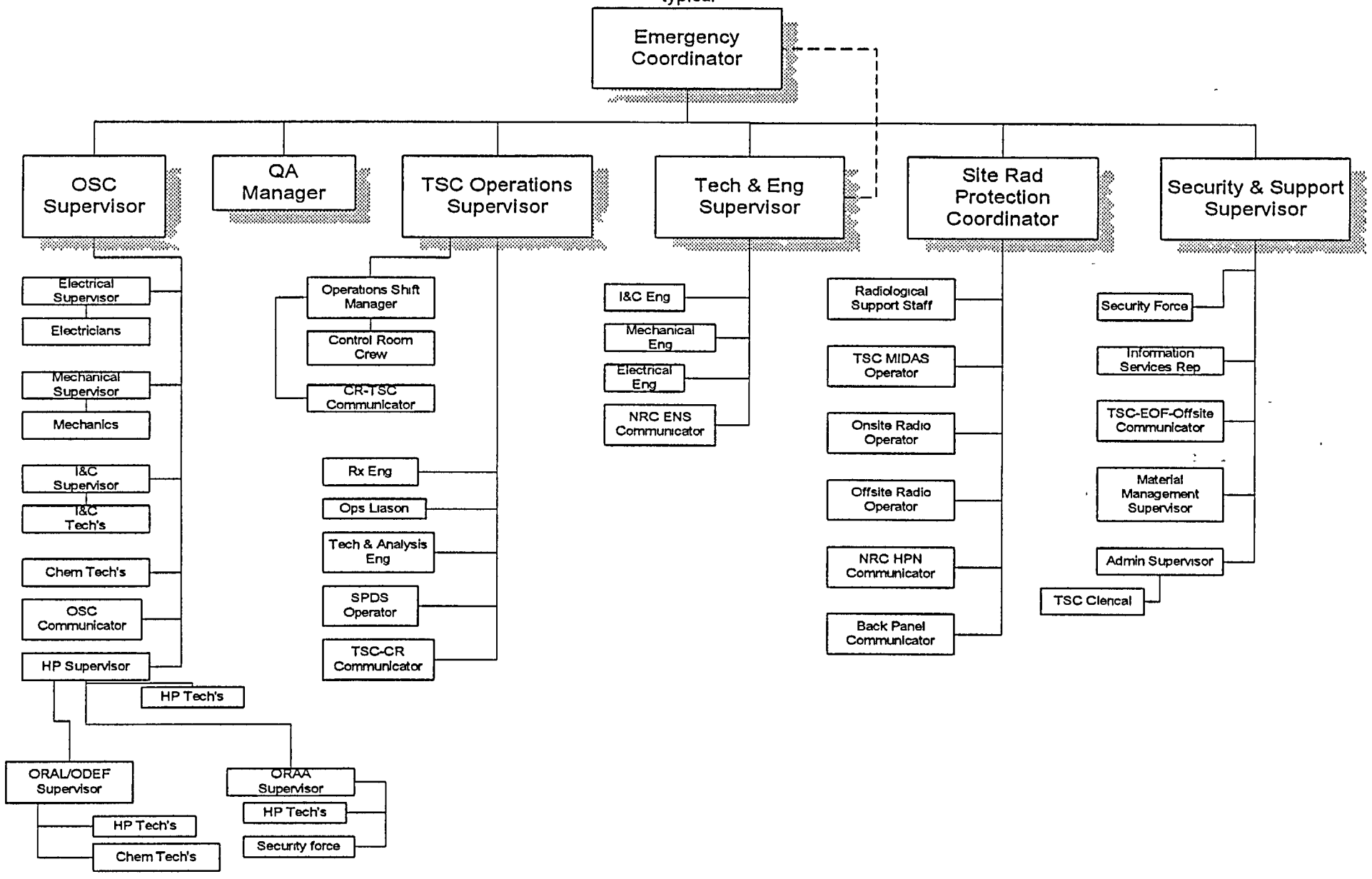
- Lifted leads and/or electrical jumpers installed and/or removed,
- Any other issue that must be documented to ensure it is returned to 'normal' when in the recovery phase.

RECOVERY

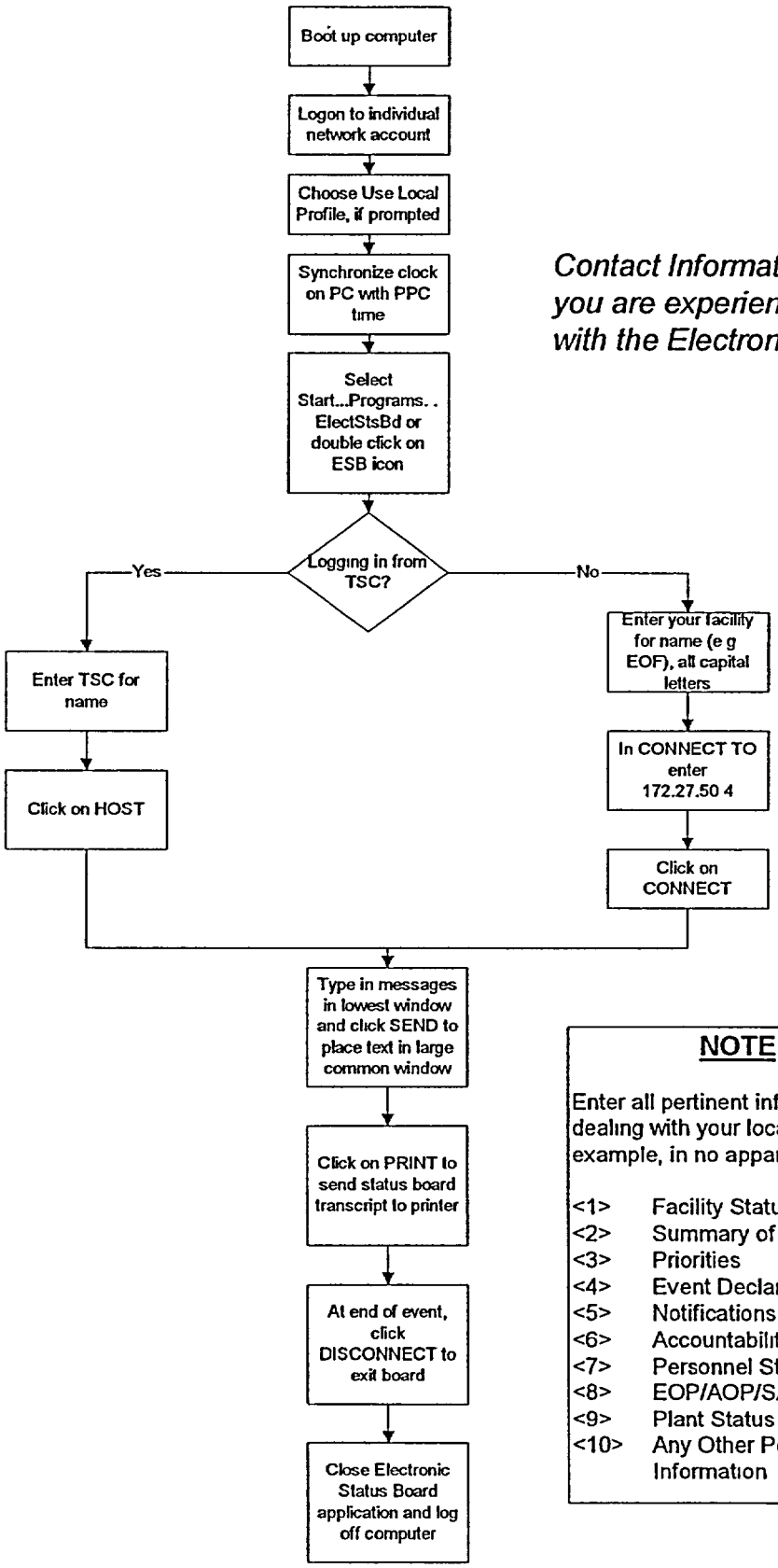
_____ Assist the EC in developing a recovery/reentry plan as necessary

TSC ORGANIZATION

typical



Instructions to Start Electronic Status Board



Contact Information Services if you are experiencing difficulties with the Electronic Status Board

NOTE

Enter all pertinent information dealing with your location. For example, in no apparent order:

<1> Facility Status
<2> Summary of Briefings
<3> Priorities
<4> Event Declarations
<5> Notifications
<6> Accountability Status
<7> Personnel Status
<8> EOP/AOP/SAG Entries
<9> Plant Status
<10> Any Other Pertinent Information